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AN OCCUPATIONAL PROFILE

OF

STATE AND LOCAL GOVERNMENT EMPLOYMENT

IN

MASSACHUSETTS

1979

REPORT NUMBER 11

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PREFACE

We wish to extend our appreciation to the many government agencies, authorities, counties and other municipalities who cooperated by supplying the occupational data from which the estimates in this publication were derived.

Our thanks is also extended to the National Office of the Bureau of Labor Statistics for survey design, definitions and estimating procedures, and to the Boston Regional Office for their technical assistance in this Federal-State cooperative effort.

INTRODUCTION

State Government

The occupational profile of employment in state government was collected from numerous sources. Among the contributors were, The Civil Service Commission, Bureau of Personnel, Comptrollers Office, and the Supreme Judicial Court. Other agencies were contacted to confirm the employment from these centralized sources.

Over two thousand different occupational titles were reported and were condensed to one hundred and twenty-five Occupational Employment Survey codes. Because of the obvious problems in converting from one set of titles to another, and the numerous sources used a certain amount of error could exist.

Since this information was last published in 1975 many changes in titles have taken place, and the structure of the survey instrument was refined. Because of these changes no comparison should be made with the previous publication.

A profile of the occupational structure of state government in Massachusetts has been constructed for May of 1979. The data gathered was compiled by occupational title, and then summed to obtain an estimate of total employment. The job level within this industrial sector was found to have just exceeded 53,200 by the reference date.

The Massachusetts government workforce was concentrated predominantly in clerical, professional and technical occupations. Positions in these fields of work tallied 32,600, or roughly 60 percent of all state government jobs.

Clerical workers, both in state government and in the Massachusetts economy in its entirety, outnumber all other occupational categories. Nearly one out of every three state workers was engaged in some type of clerical activity. Typists, general clerks, and stenographers together represented almost 70 percent of the job count in this occupational category.

Approximately 28 percent of the positions within state government were classified as part of the professional and technical occupational category. Caseworkers, such as probation and parole officers,clinical and psychiatric social workers, and welfare workers, composed the numerically most significant occupational title within this grouping. Though representing a smaller percentage of state employment, civil engineers, accountants and auditors were also found to be considerable in number.

The job count of service workers employed by the State during this period hovered around 9100. Close to forty-five percent of these occupations were filled by individuals trained as social service aides, correction and police patrol officers.

Occupations in the maintenance and production occupational category accounted for roughly 6600 positions throughout State government. In particular, heavy equipment operators, laborers, and unskilled workers were found to be most numerous.

The occupational category which commanded the smallest share of employment, (approximately 9 percent), was managers, officers, elected officials and public administration inspectors. Nearly 60 percent of the jobs in this category were classified as "all other managers."

Occupational Staffing Patterns in State Government 1/
as of May 1979

Occupational Title	Estimated 2/ Employment	Percent of Total 3/ Employment
TOTAL ALL OCCUPATIONS	53,205	100.00
Managers, Officers, Elected Officials and Public Administration Inspectors	4,850	9.12
Chief Executives, General Administrators and Legislators	220	0.41
Construction Inspectors	30	0.06
Public Administration Inspectors	1,700	3.20
All Other Managers	2,900	5.46
Professional and Technical Occupations	14,960	28.12
Judge	90	0.17
Lawyer	540	1.01
Law Clerk	60	0.11
Paralegal Personnel	200	0.38
Welfare Investigator	10	0.03
Caseworker	2,090	3.92
Community Organization Worker	40	0.07
Group Recreation Worker	140	0.26
Physician/Surgeon	10	0.02
Nurse, Professional	760	1.42
Licensed Practical Nurse	60	0.10
Medical and Dental Technicians/Technologists	90	0.17
Physical Therapists	100	0.19
All Other Therapists	30	0.06
Accountants and Auditors	1,230	2.32
Budget Analyst	50	0.10
Tax Examiner, Collector/Revenue Agent	480	0.89
Appraiser, Real Estate	40	0.07
Librarian, Professional	70	0.13
Technical Assistant, Library	50	0.09
Personnel/Labor Relations Specialists	180	0.33
Employment Interviewer	880	1.66
Vocational/Educational Counselor	610	1.15
Claims Taker, Unemployment Benefits	420	0.80
Purchasing Agent/Buyer	30	0.05
Public Relations Practitioner	100	0.18
Writer/Editor	10	0.02
Photographer	70	0.12
Commercial Artist	10	0.02
Systems Analyst, EDP	110	0.20
Computer Programmer	190	0.35
Economist	50	0.09
Psychologist	210	0.39
Urban and Regional Planner	210	0.39

State Government (cont.)

Occupational Title	Estimated 2/ Employment	Percent of Total 3/ Employment
Civil Engineer	1,460	2.75
Electrical/Electronic Engineers	20	0.04
Mechanical Engineer	10	0.01
All Other Engineers	230	0.43
Electrical/Electronic Technicians	70	0.12
Surveyor	40	0.08
Traffic Technician	70	0.12
All Other Engineering Technicians	460	0.87
Forester and Conservation Scientist	50	0.10
Biological Scientist	160	0.29
All Other Life Scientists	80	0.16
Chemist	150	0.27
Science Technicians	110	0.21
Mathematical Scientists	10	0.03
All Other Professional Workers	2,850	5.35
Clerical Occupations	17,640	33.15
Clerical Supervisor, Office or Plant	180	0.34
Court Clerk	130	0.24
Library Assistant	10	0.02
License Clerk	340	0.64
Messenger	170	0.33
Mail Clerk	140	0.26
Cashier	160	0.30
Switchboard Operator	620	1.17
Receptionist	10	0.03
Secretary	280	0.53
Stenographer	1,600	3.00
Typist	7,100	13.34
File Clerk	10	0.02
Personnel Clerk	10	0.02
Bookkeeper, Hand	410	0.77
Accounting Clerk	160	0.31
Statistical Clerk	380	0.72
Computer Operator	50	0.10
Keypunch Operator	610	1.14
Duplicating Machine Operator	80	0.16
All Other Office Machine Operators	90	0.17
General Clerk, Office	3,590	6.74
All Other Office Clerical Workers	1,340	2.51
Dispatcher, Police, Fire and Ambulance	60	0.10
Stock Clerk, Stockroom, Warehouse/Storage Yard	70	0.13
Production Clerk/Coordinator	20	0.04
Shipping/Receiving Clerk	10	0.01
Weigher, Recordkeeping	20	0.04
Operating, Maintenance, Construction, Repair, Material Handling, and Powerplant Occupations	6,640	12.48
Supervisor, Nonworking	10	0.01
Carpenter	350	0.65
Electrician	410	0.77
Machinist	50	0.10
Painter, Maintenance	90	0.17

State Government (cont.)

Occupational Title	Estimated 2/ Employment	Percent of Total 3/ Employment
Welder/Flamecutter	10	0.02
Plumber/Pipefitter	160	0.29
Mechanic, Automotive	160	0.29
Mechanic, Maintenance	10	0.02
Engineering-Equipment Mechanic	50	0.09
Street-Light Repairer and Servicer	80	0.15
Radio Mechanic	20	0.04
All Other Mechanics and Repairers	300	0.55
Maintenance Repairer, General Utility	310	0.59
Heavy Equipment Operator	1,320	2.47
Bus Driver	30	0.05
Delivery/Route Worker	120	0.22
Truck Driver	220	0.42
Highway-Maintenance Worker	280	0.52
Stationary Engineer	300	0.56
Stationary Boiler-Firer	220	0.42
Press Operator/Plant Printer	10	0.02
All Other Skilled Craft and Kindred Workers	500	0.93
All Other Operative and Semiskilled Workers	500	0.94
All Other Laborers and Unskilled Workers	1,160	2.18
Service Occupations	9,110	17.12
Supervisor, Service	20	0.04
Janitors, Porters, and Cleaners	290	0.55
Police and Detective Supervisor	240	0.46
Detective, Police	120	0.22
Police Patrol Officer	1,210	2.28
Correction Officer/Jailer	1,560	2.92
Forest Conservation Worker	180	0.33
Fish and Game Wardens	10	0.02
Recreation Facility Attendant	720	1.35
Child-Care Worker	370	0.70
Social Service Aide	2,510	4.72
Gardeners and Groundskeepers	430	0.80
Guards and Doorkeepers	120	0.23
Cook, Institution	670	1.25
All Other Food Service Workers	160	0.30
All Other Service Workers	510	0.96

1/ Coverage does not include hospitals and educational activities such as elementary and secondary schools, vocational high schools, universities, colleges, junior colleges, and technical institutes.

2/ Summed parts may not equal totals because of rounding.

3/ Percentages calculated from unrounded numbers.

INTRODUCTION

Local Government

The Sample

The second quarter 1979 report (ES-202) of employment and wages covered by the Massachusetts Employment Security Law was used as a sampling frame for the Occupational Employment Statistics survey of Local Government.

The sampling frame was stratified into nine employment size classes. All establishments were subject to sample selection on a random basis, with the units in the larger size classes having a proportionately higher chance of selection. Each unit was given a weight according to the proportion of firms selected in each size class. The sample included 119 establishments with employment of 71,589.

The Estimating Procedure

All useable questionnaires were stratified into seven size groups, by industry. Reported total employment and occupational employment on each questionnaire was multiplied by the weight assigned during sample selection. These industry data were then divided into the employment in the ES 202 report (stratified by corresponding cells) for the reference month of the survey. The result produced by this procedure is known as the benchmark factor. This factor was then applied to the occupation data, thus accounting for nonresponse. These occupational estimates were then summed across size classes in industry totals.

Sampling Error

Sampling error is an arithmetic measure of the precision of an estimate. It is the difference between the estimate computed from the sample and the result that would have been obtained if the same methods were used to collect identical information from the universe. The relative errors shown are such that the chances are 2 out of 3 that the results of a comparable full scale data collection, using the same survey approach, would not differ by more than the percent shown; the chances are 19 out of 20 that the results of a full scale data collection would not differ by more than twice the percent shown. For example, it is estimated in this report that there are 460 Accountants/ Auditors employed in Local Government making up 0.43 percent of total employment. Thus the chances are about 68 out of 100 that the results of a comparable full scale data collection would differ by less than 72 (15 percent) from the 460 estimated; similarly the estimated .43 percent of total employment would differ by less than 0.06 percent of total employment.

Nonsampling Error

The results of this survey are subject to biases and other nonsampling errors. Although careful editing and screening steps were taken, responding establishments may account for some errors in computations and processing, as well as placing workers in a wrong occupation. The nonrespondents are a source of nonsampling error for which measures are not available but are reflected in the estimating procedure.

Survey Comparisons

Since this information was last published in 1975 many changes in titles have taken place, and the structure of the survey instrument was refined. Because of these changes no comparison should be made with the previous publication.

O E S LOCAL GOVERNMENT

Nearly two out of every three jobs in Local Government are concentrated in the service, maintenance and production occupations. This is contrary to private industry as well as to Federal and State government where clerical workers predominate.

Service occupations command the greatest share of employment, with police patrol officers and fire fighters having the largest employment in this category as well as within this industrial sector.

Positions in maintenance and production totaled over 30,000, representing the second largest occupational category. Unfortunately, however, almost half of this employment had to be aggregated and classified under residual occupational categories. Highway maintenance workers and automotive mechanics had the largest employment in this major occupational group, 1830 and 1670 positions respectively.

Employment in the clerical category just exceeded 16,500, or 15 percent of the active local government workforce. Typists, general office clerks, and "all other office clerical staff" accounted for more than half of the positions in this field.

Professional and technical occupations together were responsible for nearly 13,000 jobs or 12 percent of the employment in this industrial sector. Case workers, civil engineers, librarians, and group recreation workers are a sampling of the more prominent titles included in the professional category. Among technical occupations, the only one of significant numerical importance was that of library assistant (920 positions).

The occupational category, managers, officers, and public administration officials approached a job level of 7200, accounting for nearly 7 percent of all local government employment. Just more than 55 percent of the jobs in this category were classified as "all other managers". Sales, was the occupation in this industrial sector to command the smallest number of positions.

Occupational Staffing Patterns in Local Government
as of May 1979 1/

Occupational Title	Estimated Employment 2/	Percent of Total Employment 3/	Relative Error 4/
TOTAL ALL OCCUPATIONS	107,300	100.00	N/A
Managers, Officers, and Public Administration Inspectors	7,200	6.71	N/A
Public Administration Inspectors	1,340	1.25	4
Construction Inspectors	990	0.92	16
Chief Executives, General Administrators and Legislators	890	0.83	24
All Other Managers and Officers	3,980	3.71	14
Professional Occupations	11,340	10.57	N/A
Civil Engineers	570	0.53	26
Electrical and Electronics Engineers	220	0.21	48
Mechanical Engineer	20	0.02	42
Safety Engineer	10	0.01	42
Traffic Engineer	20	0.02	47
All Other Engineers	60	0.06	N/A
Chemist	40	0.04	41
Agricultural Scientist	20	0.02	47
Forester and Conservation Scientist	20	0.02	30
Economist	20	0.02	20
Urban and Regional Planner	310	0.29	23
All Other Social Scientists	30	0.03	N/A
Systems Analyst, E.D.P.	50	0.05	19
Photographer	80	0.07	19
Purchasing Agent and/or Buyer	150	0.14	7
Accountants and Auditors	460	0.43	15
Landscape Architect	20	0.02	37
Architect	40	0.04	31
Budget Analyst	120	0.11	16
Caseworker	810	0.75	32
Dietician and/or Nutritionist	10	0.01	35
Law Clerk	30	0.03	22
Lawyer	400	0.37	17
Librarian, Professional	1,060	0.99	22
Nurse, Professional	560	0.52	34
Paralegal Personnel	220	0.21	34
Personnel and Labor Relations Specialists	200	0.19	16
Physician and/or Surgeon	200	0.19	34
Public-Relations Practitioner	90	0.08	34
Community Organization Worker	180	0.17	23
Welfare Investigator	20	0.02	39
Judge	150	0.14	39
Magistrate	10	0.01	13
Assessor	340	0.32	9
Group Recreation Worker	1,840	1.71	31
All Other Professional Workers	2,960	2.76	N/A

Local Government (cont.)

Occupational Title	Estimated Employment 2/	Percent of Total Employment 3/	Relative Error 4/
Technical Occupations	1,590	1.48	N/A
Computer Programmer	80	0.07	13
Drafter	50	0.05	27
Electrical and Electronics Technician	40	0.04	27
Surveyor	70	0.07	31
Civil Engineering Technician	160	0.15	27
All Other Engineering Technicians	90	0.08	N/A
Technical Assistant Library	920	0.86	17
Medical and Dental Technicians and Technologists	60	0.06	43
All Other Technicians	120	0.11	N/A
Service Occupations	40,020	37.30	N/A
Supervisor, Nonworking-Service	180	0.17	27
Janitors, Porters and Cleaners	2,670	2.49	13
Kitchen Helper	160	0.15	28
Cook, Institution	170	0.16	23
All Other Food Service Workers	70	0.07	30
Recreation Facility Attendant	150	0.14	26
Forest Conservation Worker	140	0.13	40
School Crossing Guard	2,500	2.33	18
Social Service Aide	130	0.12	49
Police and Detective Supervisor	2,440	2.27	22
Detective, Police	1,000	0.93	34
Police Patrol Officer	10,860	10.12	22
Correction Officer and /or Jailer	940	0.88	32
Bailiff	510	0.48	49
Fire Inspector	60	0.06	25
Fire Fighter	11,740	10.94	19
Fire Fighting and Prevention Supervisor	3,200	2.98	20
All Other Service Workers	3,100	2.89	N/A
Maintenance and Production Occupations	30,430	28.36	N/A
Supervisor, Nonworking	1,250	1.16	36
Mechanic, Automotive	1,670	1.56	46
Diesel Mechanic	20	0.02	44
Electric-Meter Installer	30	0.03	27
Gas Meter Installer	20	0.02	34
Engineering-Equipment Mechanic	40	0.04	20
Hydroelectric-Machinery Mechanic	20	0.02	27
Mechanic Maintenance	230	0.21	33
Radio Mechanic	50	0.05	37
Treatment-Plant Mechanic	50	0.05	27
Water Meter Installer	80	0.07	31
All Other Mechanics and Repairers	950	0.89	54
Truck Driver	1,070	1.00	19
Bricklayer	90	0.08	37
Carpenter	540	0.50	26
Cement Mason	120	0.11	21
Crane, Derrick and Hoist Operator	70	0.07	22

Local Government (Cont.)

Occupational Title	Estimated Employment 2/	Percent of Total Employment 3/	Relative Error 4/
Heavy Equipment Operator	1,510	1.41	20
Industrial Truck Operator	90	0.08	37
Line Installer-Repairer	320	0.30	31
Maintenance Repairer General Utility	1,240	1.16	42
Helper, Trades	390	0.36	35
Painter, Maintenance	360	0.34	19
Pipelayer	200	0.19	38
Plumber and/or Pipefitter	270	0.25	30
Press Operator and /or Plate Printer	80	0.07	39
Refuse Collector	900	0.84	40
Stationary Boiler Firer	210	0.20	28
Stationary Engineer	150	0.14	23
Street-Light Repairer and Servicer	250	0.23	14
Animal Caretaker	110	0.10	26
Watershed Tender	10	0.01	41
Water Treatment Plant Operator	220	0.21	43
Pump Station Operator, Waterworks	150	0.14	33
Welder and/or Flamecutter	120	0.11	14
Highway-Maintenance Man	1,830	1.71	22
Surveyor Helper	50	0.05	40
Gardeners and Groundskeepers	1,280	1.19	29
Ambulance Driver and/or Attendant	100	0.09	26
All Other Skilled Workers	2,940	2.74	N/A
All Other Semiskilled Workers	7,360	6.86	N/A
All Other Unskilled Workers	3,990	3.72	23
Clerical Occupations	16,680	15.55	N/A
Clerical Supervisor	390	0.36	33
Bookkeeping and/or Billing Machine Operator	170	0.16	32
Computer Operator	90	0.08	16
Keypunch Operator	120	0.11	12
Duplicating Machine Operator	120	0.11	46
All Other Office Machine Operators	160	0.15	37
Stenographer	860	0.80	19
Accounting Clerk	660	0.62	25
Bookkeeper, Hand	330	0.31	31
File Clerk	60	0.06	45
General Clerk, Office	2,670	2.49	36
Library Assistant	1,490	1.39	19
Mail Clerk	20	0.02	33
Payroll and/or Timekeeping Clerk	270	0.25	29
Personnel Clerk	90	0.08	23
Procurement Clerk	40	0.04	45
Receptionist	60	0.06	28
Secretary	900	0.84	13
Statistical Clerk	60	0.06	25
Switchboard Operator	180	0.17	15
Switchboard Operator-Receptionist	50	0.05	29
Messenger	190	0.18	48

Local Government (cont.)

Occupational Title	Estimated Employment 2/	Percent of Total Employment 3/	Relative Error 4/
Typist	3,170	2.95	17
Court Clerk	440	0.41	49
Town Clerk	110	0.10	14
All Other Office Clerical Workers	2,690	2.51	N/A
Meter Reader, Utilities	190	0.18	22
Production Clerk and/or Coordinator	30	0.03	45
Shipping and/or Receiving Clerk	50	0.05	47
Weigher, Recordkeeping	20	0.02	27
Stock Clerk, Stockroom	210	0.20	17
Dispatcher, Vehicle, Service or Work	110	0.10	38
Dispatcher, Police, Fire and Ambulance	660	0.62	23
All Other Plant Clerical	20	0.02	75
Sales Occupations	40	0.04	N/A

1/ Coverage does not include hospitals and educational activities such as elementary and secondary schools, vocational high schools, universities, colleges, junior colleges and technical institutes.

2/ Estimated employment rounded to nearest ten.

3/ Percent of total employment rounded to two decimal places.

4/ Relative error rounded to nearest unit.

Detail may not add to total due to rounding.